

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

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Claim 1 (Currently Amended): A data storage medium including ~~having~~ an optical information carrier which comprises a spiral-wound polymer film (11, 30), the central area of the data storage medium (1) being provided with a recess (36) whose periphery (37) is formed by the innermost winding (38) of the polymer film (30).

Claim 2 (Currently Amended): The data storage medium as claimed in claim 1, wherein ~~characterized in that~~ the polymer film (11) is wound in a plurality of polymer film plies (10) through which information can be read from a preselected polymer film ply (10) and, optionally, written to a preselected polymer film ply (10).

Claim 3 (Currently Amended): The data storage medium as claimed in claim 2, wherein ~~characterized in that there is~~ an adhesion layer is disposed (12) between each pair of adjacent polymer film plies (10).

Claim 4 (Currently Amended): The data storage medium as claimed in claim 3, wherein ~~characterized in that~~ the refractive index of the adhesion layer (12) differs only slightly from the refractive index of the polymer film (11).

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Claim 5 (Currently Amended): The data storage medium as claimed in claim 1,
wherein characterized in that the refractive index of the polymer film (11) can be changed locally
by heating.

Claim 6 (Currently Amended): The data storage medium as claimed in claim 5,
wherein characterized in that the polymer film (11) is assigned an absorber which is set up at
least partly to absorb a write beam and to emit the generated heat at least partly, locally, to the
polymer film (11).

Claim 7 (Currently Amended): A process for producing a data storage medium as
claimed in claim 1, the process comprising spirally-winding the polymer film (30) ~~being wound~~
~~spirally~~ onto a winding body (34; 40) and subsequently withdrawing the winding body (34; 40)
~~subsequently being withdrawn~~ from the central area of the data storage medium (1).

Claim 8 (Currently Amended): The process as claimed in claim 7 ~~for producing a~~
~~data storage medium~~, wherein the polymer film ~~is (30) being~~ provided on one side with an
adhesion layer (32) which faces outward when the polymer film (30) is wound onto ~~on~~ the
winding body (34; 40).

Claim 9 (Currently Amended): The use of the data storage medium as claimed in
claim 1 in a drive which is attuned to it and comprises a read device (2) and, optionally, a write
device (2), the read device (2) and the optional write device (2) being disposed in the recess (36)

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in the central area of the data storage medium (1) and being moved relative to the data storage medium (1), while the data storage medium (1) is stationary, for the purpose of reading and/or writing information.

Claim 10 (New): The data storage medium as claimed in claim 1, wherein the polymer film comprises biaxially-oriented polypropylene.

Claim 11 (New): The data storage medium as claimed in claim 1, wherein the polymer film comprises polymethyl methacrylate.

Claim 12 (New): The process as claimed in claim 7, wherein the winding body comprises a cylindrical winding body.

Claim 13 (New): The process as claimed in claim 7, wherein the winding body comprises a spiral-like outer contour.

Claim 14 (New): The process as claimed in claim 13, wherein the spiral-like outer contour includes a step portion.

Claim 15 (New): The process as claimed in claim 8, wherein the winding body comprises a spiral-like outer contour having a step portion with a size corresponding to the combined thickness of the polymer film and the adhesion layer.

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Claim 16 (New): A method for using a data storage medium including an optical information carrier which comprises a spiral-wound polymer film, the central area of the data storage medium being provided with a recess whose periphery is formed by the innermost winding of the polymer film, the method comprising:

disposing a read device having a read beam in the recess of the data storage medium; and
moving the read device while keeping the data storage medium stationary in order to direct the read beam onto data storage medium to read data therefrom.

Claim 17 (New): The method as claimed in claim 16, wherein the read device is part of a read/write device that also has a write beam, and the method further comprises:

moving the read/write device while keeping the data storage medium stationary in order to direct the write beam onto the data storage medium to write data thereto.

Claim 18 (New): A data storage medium including a spirally-wound information carrier, the central area of the data storage medium being provided with a recess which contains no winding core and whose periphery is formed by the innermost winding of the information carrier.

Claim 19 (New): The data storage medium as claimed in claim 18, wherein the information carrier comprises a polymer film.

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Claim 20 (New): The data storage medium as claimed in claim 19, wherein the polymer film comprises a polymer film having an optical property that can be changed locally by heat.

Claim 21 (New): The data storage medium as claimed in claim 20, further comprising an absorber for absorbing the heat and subsequently emitting at least part of the absorbed heat to the polymer film.

Claim 22 (New): The data storage medium as claimed in claim 18, wherein the information carrier is spirally-wound so as to provide a plurality of plies.

Claim 23 (New): The data storage medium as claimed in claim 22, further comprising:
an adhesion layer disposed between adjacent plies of the information carrier.

Claim 24 (New): The data storage medium as claimed in claim 23, wherein the adhesion layer comprises acrylate adhesive.

Claim 25 (New): The data storage medium as claimed in claim 23, wherein the adhesion layer comprises acrylate adhesive mixed with an absorber dye for absorbing heat.

Claim 26 (New): A memory device comprising:
a data storage medium as claimed in claim 22; and

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Concl. a read head provided in the recess for reading data from the spirally-wound information carrier by focusing a light beam on selected individual plies.

Claim 27 (New): The memory device according to claim 26, wherein data is read by moving the read head and keeping the data storage medium stationary.

Claim 28 (New): A memory device comprising:
a data storage medium as claimed in claim 22; and
a read/write head provided in the recess for reading data from and writing data to the spirally-wound information carrier by focusing a light beam on selected individual plies.

Claim 29 (New): The memory device according to claim 28, wherein data is read or written by moving the read/write head and keeping the data storage medium stationary.